

Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Lucas County, Iowa

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
13B: Zook-----	45	Very limited Restricted permeability Depth to saturated zone Leaching limitation	1.00  1.00  0.50	Very limited Depth to saturated zone Restricted permeability	1.00  1.00	Very limited Depth to saturated zone Restricted permeability Too steep for surface application	1.00  1.00  0.01
Olmitz-----	30	Not limited		Not limited		Somewhat limited Too steep for surface application	0.08
Vesser-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Too steep for surface application	1.00  0.08
23C: Arispe-----	100	Very limited Restricted permeability Depth to saturated zone	1.00  0.43	Very limited Restricted permeability Depth to saturated zone	1.00  0.43	Very limited Restricted permeability Too steep for surface application Depth to saturated zone Too steep for sprinkler application	1.00  0.91  0.43  0.02
23C2: Arispe-----	100	Very limited Restricted permeability Depth to saturated zone	1.00  0.43	Very limited Restricted permeability Depth to saturated zone	1.00  0.43	Very limited Restricted permeability Too steep for surface application Depth to saturated zone Too steep for sprinkler application	1.00  0.91  0.43  0.02

Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Lucas County, Iowa

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
24D: Shelby-----	100	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	0.77
		Too acid	0.02	Too acid	0.07	Restricted permeability Too acid	0.22 0.07
24D2: Shelby-----	100	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	0.77
		Too acid	0.02	Too acid	0.07	Restricted permeability Too acid	0.22 0.07
24E2: Shelby-----	95	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	1.00
		Too acid	0.02	Too acid	0.07	Restricted permeability Too acid	0.22 0.07
24E3: Shelby-----	95	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	1.00
		Too acid	0.02	Too acid	0.07	Restricted permeability Too acid	0.22 0.07

Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Lucas County, Iowa

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
24F2: Shelby-----	100	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	1.00
		Too acid	0.02	Too acid	0.07	Restricted permeability Too acid	0.22 0.07
51: Vesser-----	90	Very limited Depth to saturated zone	1.00	Very limited Flooding	1.00	Very limited Depth to saturated zone	1.00
		Flooding	0.60	Depth to saturated zone	1.00	Flooding	0.60
51+: Vesser-----	90	Very limited Depth to saturated zone	1.00	Very limited Flooding	1.00	Very limited Depth to saturated zone	1.00
		Flooding	0.60	Depth to saturated zone	1.00	Flooding	0.60
51B: Vesser-----	90	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
						Too steep for surface application	0.08
51B+: Vesser-----	90	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
						Too steep for surface application	0.08
54: Zook-----	95	Very limited Restricted permeability	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Flooding	1.00	Restricted permeability	1.00

Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Lucas County, Iowa

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
54+: Zook-----	95	Flooding	0.60	Restricted permeability	1.00	Flooding	0.60
		Leaching limitation	0.50				
		Very limited				Very limited	
		Restricted permeability	1.00			Depth to saturated zone	1.00
		Depth to saturated zone	1.00			Restricted permeability	1.00
		Flooding	0.60			Flooding	0.60
54B: Zook-----	90	Leaching limitation	0.50	Restricted permeability	1.00		
		Very limited				Very limited	
		Restricted permeability	1.00			Depth to saturated zone	1.00
		Depth to saturated zone	1.00			Restricted permeability	1.00
65E: Lindley-----	95	Leaching limitation	0.50	Restricted permeability	1.00	Too steep for surface application	0.08
		Very limited				Very limited	
		Slope	1.00			Too steep for surface application	1.00
		Restricted permeability	0.30			Too steep for sprinkler application	1.00
65E2: Lindley-----	95	Too acid	0.08	Restricted permeability	0.22	Too acid	0.31
						Restricted permeability	0.22
		Very limited				Very limited	
		Slope	1.00			Too steep for surface application	1.00
65E2: Lindley-----	95	Restricted permeability	0.30	Too acid	0.31	Too steep for sprinkler application	1.00

Lucas County, Iowa

USDA-NRCS, IOWA

04/27/2002

Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Lucas County, Iowa

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
93D2: Shelby-----	60	Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	0.30	Too acid	0.31	Too steep for sprinkler application	1.00
		Too acid	0.08	Restricted permeability	0.22	Too acid	0.31
						Restricted permeability	0.22
		Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	0.77
		Too acid	0.02	Too acid	0.07	Restricted permeability Too acid	0.22
							0.07
		Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00	Very limited Too steep for surface application	1.00
		Depth to saturated zone Slope	1.00 0.63	Depth to saturated zone Slope	1.00 0.63	Restricted permeability Depth to saturated zone Too steep for sprinkler application	1.00 1.00 0.77
Adair-----	40						
94D2: Mystic-----	60	Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00	Very limited Too steep for surface application	1.00
		Depth to saturated zone Slope	1.00 0.63	Depth to saturated zone Slope	1.00 0.63	Restricted permeability Depth to saturated zone	1.00 1.00
		Too acid	0.08	Too acid	0.31	Too steep for sprinkler application	0.77

Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Lucas County, Iowa

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Caleb-----	40	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Too acid	0.31
						Very limited Too steep for surface application	1.00
		Too acid	0.08	Too acid	0.31	Too steep for sprinkler application Too acid	0.77 0.31
94E2: Mystic-----	60	Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00	Very limited Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Restricted permeability	1.00
		Too acid	0.08	Too acid	0.31	Depth to saturated zone Too acid	1.00 0.31
Caleb-----	35	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Too steep for surface application	1.00
						Too steep for sprinkler application Too acid	1.00 0.31
131B: Pershing-----	90	Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00
						Depth to saturated zone	0.43
		Depth to saturated zone Too acid	0.43 0.08	Depth to saturated zone Too acid	0.43 0.31	Too acid Too steep for surface application	0.31 0.08
131C: Pershing-----	100	Very limited		Very limited		Very limited	

Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Lucas County, Iowa

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
131C2: Pershing-----	100	Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Depth to saturated zone	0.43	Depth to saturated zone	0.43	Too steep for surface application	0.91
		Too acid	0.08	Too acid	0.31	Depth to saturated zone	0.43
						Too acid	0.31
						Too steep for sprinkler application	0.02
		Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Depth to saturated zone	0.43	Depth to saturated zone	0.43	Too steep for surface application	0.91
		Too acid	0.08	Too acid	0.31	Depth to saturated zone	0.43
131D2: Pershing-----	100					Too acid	0.31
						Too steep for sprinkler application	0.02
		Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Slope	0.63	Slope	0.63	Restricted permeability	1.00
		Depth to saturated zone	0.43	Depth to saturated zone	0.43	Too steep for sprinkler application	0.77
		Too acid	0.08	Too acid	0.31	Depth to saturated zone	0.43
						Too acid	0.31
132B: Weller-----	100	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Depth to saturated zone	0.43	Depth to saturated zone	0.43	Depth to saturated zone	0.43
		Too acid	0.08	Too acid	0.31	Too acid	0.31



Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Lucas County, Iowa

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
132C: Weller-----	100					Too steep for surface application	0.08
		Very limited		Very limited		Very limited	
		Restricted	1.00	Restricted	1.00	Restricted	1.00
		permeability		permeability		permeability	
132C2: Weller-----	100	Depth to	0.43	Depth to	0.43	Too steep for surface application	0.91
		saturated zone		saturated zone		Depth to	0.43
		Too acid	0.08	Too acid	0.31	saturated zone	
						Too acid	0.31
132D2: Weller-----	100					Too steep for sprinkler application	0.02
		Very limited		Very limited		Very limited	
		Restricted	1.00	Restricted	1.00	Restricted	1.00
		permeability		permeability		permeability	
132D2: Weller-----	100	Depth to	0.43	Depth to	0.43	Too steep for surface application	0.91
		saturated zone		saturated zone		Depth to	0.43
		Too acid	0.08	Too acid	0.31	saturated zone	
						Too acid	0.31
132D2: Weller-----	100					Too steep for sprinkler application	0.02
		Very limited		Very limited		Very limited	
		Restricted	1.00	Restricted	1.00	Too steep for surface application	1.00
		permeability		permeability		Restricted	1.00
172: Wabash-----	95	Slope	0.63	Slope	0.63	permeability	
		Depth to	0.43	Depth to	0.43	Too steep for sprinkler application	0.77
		saturated zone		saturated zone		Depth to	0.43
		Too acid	0.08	Too acid	0.31	saturated zone	
172: Wabash-----	95					Too acid	0.31
		Very limited		Very limited		Very limited	

Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Lucas County, Iowa

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
179D2: Gara-----	95	Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	0.60	Flooding	1.00	Flooding	0.60
		Runoff limitation	0.40				
179E: Gara-----	95	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	0.77
						Restricted permeability	0.22
179E2: Gara-----	95	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	1.00
						Restricted permeability	0.22
179E3: Gara-----	95	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	1.00
						Restricted permeability	0.22

Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Lucas County, Iowa

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
179F: Gara-----	100	Very limited Slope	1.00	Very limited Slope	1.00	Restricted permeability	0.22
						Very limited Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application	1.00
						Restricted permeability	0.22
179F2: Gara-----	100	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Restricted permeability	0.22
179G2: Gara-----	100	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Restricted permeability	0.22
192C2: Adair-----	95	Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00
						Depth to saturated zone	1.00
						Too steep for surface application	0.91

Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Lucas County, Iowa

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
192D2: Adair-----	95					Too steep for sprinkler application	0.02
		Very limited		Very limited		Very limited	
		Restricted	1.00	Restricted	1.00	Too steep for surface application	1.00
		permeability		permeability		Restricted	1.00
		Depth to	1.00	Depth to	1.00	permeability	1.00
211: Edina-----	90	saturated zone	0.63	saturated zone	0.63	Depth to	1.00
		Slope		Slope		saturated zone	0.77
						Too steep for sprinkler application	
		Very limited		Very limited		Very limited	
		Restricted	1.00	Restricted	1.00	Restricted	1.00
220: Nodaway-----	90	permeability		permeability		permeability	
		Depth to	1.00	Depth to	1.00	Depth to	1.00
		saturated zone	0.40	saturated zone	0.07	saturated zone	0.07
		Runoff limitation	0.02	Too acid		Too acid	
		Too acid					
222C: Clarinda-----	100	Somewhat limited		Very limited		Somewhat limited	
		Flooding	0.60	Flooding	1.00	Flooding	0.60
		Very limited		Very limited		Very limited	
		Restricted	1.00	Restricted	1.00	Restricted	1.00
222C2: Clarinda-----	100	permeability		permeability		permeability	
		Depth to	1.00	Depth to	1.00	Depth to	1.00
		saturated zone	0.40	saturated zone	0.07	saturated zone	0.91
		Runoff limitation		Too acid		Too steep for surface application	0.07
		Too acid	0.02			Too acid	0.02
222C2: Clarinda-----	100					Too steep for sprinkler application	
		Very limited		Very limited		Very limited	
		Restricted	1.00	Restricted	1.00	Restricted	1.00
		permeability		permeability		permeability	

Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Lucas County, Iowa

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
222C3: Clarinda-----	100	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Runoff limitation	0.40	Too acid	0.07	Too steep for surface application	0.91
		Too acid	0.02			Too acid	0.07
						Too steep for sprinkler application	0.02
		Very limited		Very limited		Very limited	
		Restricted	1.00	Restricted	1.00	Restricted	1.00
		permeability		permeability		permeability	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Runoff limitation	0.40	Too acid	0.07	Too steep for surface application	0.91
		Too acid	0.02			Too acid	0.07
222D2: Clarinda-----	100	Very limited		Very limited		Very limited	
		Restricted	1.00	Restricted	1.00	Restricted	1.00
		permeability		permeability		permeability	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too steep for surface application	1.00
		Slope	0.63	Slope	0.63	Depth to saturated zone	1.00
		Runoff limitation	0.40	Too acid	0.07	Too steep for sprinkler application	0.77
		Too acid	0.02			Too acid	0.07
223C2: Rinda-----	100	Very limited		Very limited		Very limited	
		Restricted	1.00	Restricted	1.00	Restricted	1.00
		permeability		permeability		permeability	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Runoff limitation	0.40	Too acid	0.07	Too steep for surface application	0.91
		Too acid	0.02			Too acid	0.07

Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Lucas County, Iowa

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
223D2: Rinda-----	100					Too steep for sprinkler application	0.02
		Very limited		Very limited		Very limited	
		Restricted	1.00	Restricted	1.00	Restricted	1.00
		permeability		permeability		permeability	
		Depth to	1.00	Depth to	1.00	Too steep for	1.00
		saturated zone		saturated zone		surface application	
269: Humeston-----	95	Slope	0.63	Slope	0.63	Depth to	1.00
		Runoff limitation	0.40	Too acid	0.07	saturated zone	
						Too steep for	0.77
		Too acid	0.02			sprinkler application	
						Too acid	0.07
269+: Humeston-----	95	Very limited		Very limited		Very limited	
		Restricted	1.00	Restricted	1.00	Restricted	1.00
		permeability		permeability		permeability	
		Depth to	1.00	Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone		saturated zone	
		Flooding	0.60	Flooding	1.00	Flooding	0.60
273B: Olmitz-----	100	Leaching	0.50	Too acid	0.07	Too acid	0.07
		limitation					
		Too acid	0.02				
273C: Olmitz-----	100	Very limited		Very limited		Very limited	
		Restricted	1.00	Restricted	1.00	Restricted	1.00
		permeability		permeability		permeability	
		Depth to	1.00	Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone		saturated zone	
		Flooding	0.60	Flooding	1.00	Flooding	0.60
273C: Olmitz-----	100	Leaching	0.50	Too acid	0.07	Too acid	0.07
		limitation					
		Too acid	0.02				
273B: Olmitz-----	100	Not limited		Not limited		Somewhat limited	
						Too steep for	
						surface	
						application	
							0.08
273C: Olmitz-----	100	Not limited		Not limited		Somewhat limited	

Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Lucas County, Iowa

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
313D2: Gosport-----	90					Too steep for surface application	0.91
						Too steep for sprinkler application	0.02
		Somewhat limited Depth to saturated zone	0.95	Somewhat limited Depth to saturated zone	0.95	Very limited Too steep for surface application	1.00
		Droughty	0.75	Droughty	0.75	Depth to saturated zone	0.95
		Slope	0.63	Slope	0.63	Too steep for sprinkler application	0.77
		Depth to bedrock Restricted permeability	0.46 0.30	Depth to bedrock Restricted permeability	0.46 0.22	Droughty Depth to bedrock	0.75 0.46
313E2: Gosport-----	90	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Too steep for surface application	1.00
		Depth to saturated zone	0.95	Depth to saturated zone	0.95	Too steep for sprinkler application	1.00
		Droughty	0.75	Droughty	0.75	Depth to saturated zone	0.95
		Depth to bedrock Restricted permeability	0.46 0.30	Depth to bedrock Restricted permeability	0.46 0.22	Droughty Depth to bedrock	0.75 0.46
313F: Gosport-----	90	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Too steep for surface application	1.00
		Depth to saturated zone	0.95	Depth to saturated zone	0.95	Too steep for sprinkler application	1.00
		Droughty	0.71	Droughty	0.71	Depth to saturated zone	0.95
		Depth to bedrock	0.46	Depth to bedrock	0.46	Droughty	0.71

Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Lucas County, Iowa

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
313F2: Gosport-----	90	Restricted permeability	0.30	Restricted permeability	0.22	Depth to bedrock	0.46
		Very limited Slope	1.00	Very limited Slope	1.00	Very limited Too steep for surface application	1.00
		Depth to saturated zone	0.95	Depth to saturated zone	0.95	Too steep for sprinkler application	1.00
		Droughty	0.75	Droughty	0.75	Depth to saturated zone	0.95
		Depth to bedrock	0.46	Depth to bedrock	0.46	Droughty	0.75
362: Haig-----	90	Restricted permeability	0.30	Restricted permeability	0.22	Depth to bedrock	0.46
		Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Leaching limitation	0.50	Restricted permeability	1.00	Restricted permeability	1.00
364B: Grundy-----	95	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Depth to saturated zone	0.95	Depth to saturated zone	0.95	Depth to saturated zone	0.95
423C2: Bucknell-----	95	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Runoff limitation	0.40			Too steep for surface application	0.91



Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Lucas County, Iowa

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
423D: Bucknell-----	95					Too steep for sprinkler application	0.02
		Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00	Very limited Too steep for surface application	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Restricted permeability	1.00
		Slope	0.63	Slope	0.63	Depth to saturated zone	1.00
		Runoff limitation	0.40			Too steep for sprinkler application	0.77
423D2: Bucknell-----	95	Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00	Very limited Too steep for surface application	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Restricted permeability	1.00
		Slope	0.63	Slope	0.63	Depth to saturated zone	1.00
		Runoff limitation	0.40			Too steep for sprinkler application	0.77
425D: Keswick-----	95	Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00	Very limited Too steep for surface application	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Restricted permeability	1.00
		Slope	0.63	Slope	0.63	Depth to saturated zone	1.00
		Too acid	0.08	Too acid	0.31	Too steep for sprinkler application	0.77
425D2: Keswick-----	95	Very limited		Very limited		Too acid	0.31
						Very limited	

Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Lucas County, Iowa

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
430: Ackmore-----	90	Restricted permeability	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Restricted permeability	1.00
		Slope	0.63	Slope	0.63	Depth to saturated zone	1.00
		Too acid	0.08	Too acid	0.31	Too steep for sprinkler application	0.77
451D2: Caleb-----	90					Too acid	0.31
		Very limited Depth to saturated zone	1.00	Very limited Flooding	1.00	Very limited Depth to saturated zone	1.00
		Flooding	0.60	Depth to saturated zone	1.00	Flooding	0.60
451D2: Caleb-----	90	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Too steep for surface application	1.00
		Too acid	0.08	Too acid	0.31	Too steep for sprinkler application	0.77
						Too acid	0.31
451E2: Caleb-----	90	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Too steep for surface application	1.00
		Too acid	0.08	Too acid	0.31	Too steep for sprinkler application	1.00
						Too acid	0.31
452C: Lineville-----	100	Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00
		Depth to dense layer	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00			Too steep for surface application	0.91

Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Lucas County, Iowa

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
452C2: Lineville-----	100					Too steep for sprinkler application	0.02
		Very limited		Very limited		Very limited	
		Restricted	1.00	Restricted	1.00	Restricted	1.00
		permeability		permeability		permeability	
		Depth to dense layer	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
453: Tuskeego-----	95	Depth to saturated zone	1.00			Too steep for surface application	0.91
		Leaching limitation	0.50			Too steep for sprinkler application	0.02
		Too acid	0.02				
				Very limited		Very limited	
		Restricted	1.00	Restricted	1.00	Restricted	1.00
470D2: Lamoni-----	70	permeability		permeability		permeability	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	0.63	Slope	0.63	Too steep for sprinkler application	0.77
		Too acid	0.02	Too acid	0.07	Too acid	0.07
Shelby-----	30	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited	
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for surface application	1.00
						Too steep for sprinkler application	0.77

Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Lucas County, Iowa

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
484: Lawson-----	90	Too acid	0.02	Too acid	0.07	Restricted permeability Too acid	0.22 0.07
		Very limited Depth to saturated zone	1.00	Very limited Flooding	1.00	Very limited Depth to saturated zone	1.00
		Flooding	0.60	Depth to saturated zone	1.00	Flooding	0.60
		Runoff limitation	0.40				
587: Chequest-----	90	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Flooding	0.60	Flooding	1.00	Flooding	0.60
		Restricted permeability	0.30	Restricted permeability	0.22	Restricted permeability	0.22
587+: Chequest-----	90	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Flooding	0.60	Flooding	1.00	Flooding	0.60
		Restricted permeability	0.30	Restricted permeability	0.22	Restricted permeability	0.22
592C2: Mystic-----	90	Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.08	Too acid	0.31	Too steep for surface application	0.91
						Too acid Too steep for sprinkler application	0.31 0.02
592D2: Mystic-----	90	Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00	Very limited Too steep for surface application	1.00

Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Lucas County, Iowa

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
711: Nodaway-----	70	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Restricted permeability	1.00
		Slope	0.63	Slope	0.63	Depth to saturated zone	1.00
		Too acid	0.08	Too acid	0.31	Too steep for sprinkler application	0.77
Lawson-----	25					Too acid	0.31
		Somewhat limited Flooding	0.60	Very limited Flooding	1.00	Somewhat limited Flooding	0.60
		Runoff limitation	0.40				
792C: Armstrong-----	100	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Flooding	1.00	Depth to saturated zone	1.00
		Flooding	0.60	Depth to saturated zone	1.00	Flooding	0.60
792C2: Armstrong-----	100	Runoff limitation	0.40				
		Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
						Too steep for surface application	0.91
						Too steep for sprinkler application	0.02
		Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
						Too steep for surface application	0.91
						Too steep for sprinkler application	0.02

Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Lucas County, Iowa

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
792D: Armstrong-----	100	Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00	Very limited Too steep for surface application	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Restricted permeability	1.00
		Slope	0.63	Slope	0.63	Depth to saturated zone	1.00
						Too steep for sprinkler application	0.77
792D2: Armstrong-----	100	Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00	Very limited Too steep for surface application	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Restricted permeability	1.00
		Slope	0.63	Slope	0.63	Depth to saturated zone	1.00
						Too steep for sprinkler application	0.77
792D3: Armstrong-----	100	Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00	Very limited Too steep for surface application	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Restricted permeability	1.00
		Slope	0.63	Slope	0.63	Depth to saturated zone	1.00
						Too steep for sprinkler application	0.77
822C: Lamoni-----	95	Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.01	Too acid	0.01	Too steep for surface application	0.91

Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Lucas County, Iowa

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
822C2: Lamoni-----	95	Very limited Restricted permeability Depth to saturated zone Too acid	1.00 1.00 0.01	Very limited Restricted permeability Depth to saturated zone Too acid	1.00 1.00 0.01	Too steep for sprinkler application	0.02
						Too acid	0.01
						Very limited	
						Restricted permeability	1.00
						Depth to saturated zone	1.00
822D: Lamoni-----	95	Very limited Restricted permeability Depth to saturated zone Slope Too acid	1.00 1.00 0.63 0.01	Very limited Restricted permeability Depth to saturated zone Slope Too acid	1.00 1.00 0.63 0.01	Too steep for surface application	0.91
						Too steep for sprinkler application	0.02
						Too acid	0.01
						Very limited	
						Too steep for surface application	1.00
822D2: Lamoni-----	95	Very limited Restricted permeability Depth to saturated zone Slope Too acid	1.00 1.00 0.63 0.01	Very limited Restricted permeability Depth to saturated zone Slope Too acid	1.00 1.00 0.63 0.01	Restricted permeability	1.00
						Depth to saturated zone	1.00
						Too steep for sprinkler application	0.77
						Too acid	0.01
						Very limited	
822D2: Lamoni-----	95	Very limited Restricted permeability Depth to saturated zone Slope Too acid	1.00 1.00 0.63 0.01	Very limited Restricted permeability Depth to saturated zone Slope Too acid	1.00 1.00 0.63 0.01	Too steep for surface application	1.00
						Restricted permeability	1.00
						Depth to saturated zone	1.00
						Too steep for sprinkler application	0.77
						Too acid	0.01

Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Lucas County, Iowa

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
831B: Pershing-----	100	Very limited Restricted permeability Depth to saturated zone Too acid	1.00 0.43 0.08	Very limited Restricted permeability Depth to saturated zone Too acid	1.00 0.43 0.31	Very limited Restricted permeability Depth to saturated zone Too acid Too steep for surface application	1.00 0.43 0.31 0.08
831C: Pershing-----	100	Very limited Restricted permeability Depth to saturated zone Too acid	1.00 0.43 0.08	Very limited Restricted permeability Depth to saturated zone Too acid	1.00 0.43 0.31	Very limited Restricted permeability Too steep for surface application Depth to saturated zone Too acid Too steep for sprinkler application	1.00 0.91 0.43 0.31 0.02
831C2: Pershing-----	100	Very limited Restricted permeability Depth to saturated zone Too acid	1.00 0.43 0.08	Very limited Restricted permeability Depth to saturated zone Too acid	1.00 0.43 0.31	Very limited Restricted permeability Too steep for surface application Depth to saturated zone Too acid Too steep for sprinkler application	1.00 0.91 0.43 0.31 0.02
894D2: Bucknell-----	65	Very limited Restricted permeability Depth to saturated zone Slope	1.00 1.00 0.63	Very limited Restricted permeability Depth to saturated zone Slope	1.00 1.00 0.63	Very limited Too steep for surface application Restricted permeability Depth to saturated zone	1.00 1.00 1.00



Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Lucas County, Iowa

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Gara-----	35	Runoff limitation	0.40	Too acid	0.07	Too steep for sprinkler application	0.77
		Too acid	0.02			Too acid	0.07
		Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application Restricted permeability	0.77 0.22
993D2: Gara-----	60	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Too steep for surface application	1.00
		Restricted permeability	0.30	Restricted permeability	0.22	Too steep for sprinkler application Restricted permeability	0.77 0.22
Armstrong-----	40	Very limited Restricted permeability	1.00	Very limited Restricted permeability	1.00	Very limited Too steep for surface application	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Restricted permeability	1.00
		Slope	0.63	Slope	0.63	Depth to saturated zone	1.00
						Too steep for sprinkler application	0.77
1711: Nodaway-----	65	Very limited Flooding Runoff limitation	1.00 0.40	Very limited Flooding	1.00	Very limited Flooding	1.00
Lawson-----	25	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00

Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Lucas County, Iowa

Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
5021: Orthents-----	100	Not rated		Not rated		Not rated	
5025: Strip Mines-----	100	Not rated		Not rated		Not rated	
5040: Orthents-----	100	Not rated		Not rated		Not rated	
INT: Intermittent Water--	100	Not rated		Not rated		Not rated	
SL: Sewage Lagoon-----	100	Not rated		Not rated		Not rated	
W: Water Less Than 40 Acres-----	100	Not rated		Not rated		Not rated	